## 36-3535: Anti-CD19 (B-Lymphocyte Marker) Monoclonal Antibody(Clone: CD19/3116)

| Clonality : | Monoclonal |
| :--- | :--- |
| Clone Name : | CD19/3116 |
| Application : | ELISA,FACS,IHC |
| Reactivity : | Human |
| Gene : | CD19 |
| Gene ID : | 930 |
| Uniprot ID : | P15391 |
| Alternative Name : | B-lymphocyte antigen CD19; B-lymphocyte surface antigen B4; CVID3; Leu-12; T-cell surface |
| antigen Leu-12 |  |
| Isotype : | Mouse IgG1, kappa |
| Immunogen Information : Recombinant fragment of human CD19 protein (around aa96-281) (exact sequence is proprietary) |  |

## Description

CD19 is a transmembrane glycoprotein that contains two extracellular immunoglobulin-like domains. CD19 is present in both benign and malignant B-cells and is considered to be the most reliable surface marker of this lineage over a wide range of maturational stages. In normal lymphoid tissue, CD19 is observed in germinal centers, in mantle zone cells, and in scattered cells of the inter-follicular areas. Anti-CD19 exhibits an overall immunoreactivity pattern similar to those of the antibodies against CD20 and CD22. However, in contrast to CD20, expression of CD19 is continuous throughout B-cell development and through terminal differentiation of B-cells into plasma cells. Anti-CD19 positivity is seen in the vast majority of B-cell neoplasms commonly at a lower intensity than normal B-cell counterparts. Plasma cell neoplasms are nearly always negative, as are T-cell neoplasms.

## Product Info

## Amount :

## Content :

## Storage condition :

## $20 \mu \mathrm{~g} / 100 \mu \mathrm{~g}$

$200 \mu \mathrm{~g} / \mathrm{ml}$ of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10 mM PBS with $0.05 \%$ BSA \& $0.05 \%$ azide. Also available WITHOUT BSA \& azide at $1.0 \mathrm{mg} / \mathrm{ml}$.
Antibody with azide - store at 2 to $8^{\circ} \mathrm{C}$. Antibody without azide - store at -20 to $-80^{\circ} \mathrm{C}$. Antibody is stable for 24 months. Non-hazardous.

## Application Note

ELISA (For coating, order antibody without BSA); ,Flow Cytometry (1-2ug/million cells); ,Immunohistochemistry (Formalin-fixed) ( $1-2 \mathrm{ug} / \mathrm{ml}$ for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 45 min at 95\&degC followed by cooling at RT for 20 minutes);


Fig. 1: Formalin-fixed, paraffin-embedded human Tonsil stained with CD19 Monospecific Mouse Monoclonal Antibody (CD19/3116).


Fig. 2: Formalin-fixed, paraffin-embedded human Tonsil stained with CD19 Monospecific Mouse Monoclonal Antibody (CD19/3116).




Fig. 3: Flow Cytometric Analysis of Raji cells using CD19 Monospecific Mouse Monoclonal Antibody (CD19/3116) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

Fig. 4: SDS-PAGE Analysis Purified CD19 Monospecific Mouse Monoclonal Antibody (CD19/3116). Confirmation of Integrity and Purity of Antibody.

Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using CD19 Monospecific Mouse Monoclonal Antibody (CD19/3116). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S -score of at least 2.5 . For example, if a MAb binds to protein $X$ with a $Z$-score of 43 and to protein $Y$ with a $Z$-score of 14, then the S -score for the binding of that MAb to protein X is equal to 29 .

